AD-A050 960

TRANSPORTATION SYSTEMS CENTER CAMBRIDGE MASS SUMMARY OF AIRLINE DELAY TRENDS 1972-1975.(U) OCT 77 H CONDELL, S R HOROWITZ

TSC-FAA-77-6-F

FAA-EN-77-12

NL

TO I

TRANSPORTATION SYSTEMS CENTER CAMBRIDGE MASS SUMMARY OF AIRLINE DELAY TRENDS 1972-1975.(U)
OCT 77 H CONDELL, S R HOROWITZ

FAA-EN-77-12

NL

TO I

TRANSPORTATION SYSTEMS CENTER CAMBRIDGE MASS SUMMARY OF AIRLINE DELAY TRENDS 1972-1975.(U)
OCT 77 H CONDELL, S R HOROWITZ

FAA-EN-77-12

NL

TO I

TO I

TRANSPORTATION SYSTEMS CENTER CAMBRIDGE MASS SUMMARY OF AIRLINE DELAY TRENDS 1972-1975.(U)
OCT 77 H CONDELL, S R HOROWITZ

FAA-EN-77-12

NL

TO I

T

11050505

SUMMARY OF AURUME DELAY TREMDS 1972 - 1975





	(19)		Technical Report Documentation Pagi
1. 8 No.	A-EM 77-12	2. Government Accession No.	3. Recovent's Catalog No.
4. Title and Se	THE STATE OF THE S	_	October 1977
(	SUMMARY OF AL	IRLINE DELAY TRENDS	6. Performing Organization Code
1	1972-1		(14)
7. (10) He	elen/Condell/Seymo	our R./Horowitz	B. Performing Organization Report Nerform
9. Performing C	rganization Name and Address		10. Work Unit No. (TRAIS)
	artment of Transportation Systems Cent		FA840/R8125
Kendall S	Square	(12)61p.	The Confidence of Grant No.
	MA 02142 Agency Name and Address		3. Type of Report and Paned Govered
U.S. Depa	rtment of Transpor		Final Report,
	viation Administra Systems Engineeri		14. Sponsoring Agency Code
	on DC 20591		Sponsoring Agency Code
Report pu	blished since 1974	. These reports provid	nnual Airline Delay Trends e estimates of block, airborne,
This Report pu and groun most acti Delay ini ground da graph for	ablished since 1974 and delays for approve U.S. airports, formation as present a for each of the rm, for the years 1	these reports provided in the segment of the segmen	nnual Airline Delay Trends e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories: s arriving at each of the
This Report pu and groun most acti Delay ini ground da graph for	ablished since 1974 and delays for approve U.S. airports, formation as present a for each of the rm, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 -	these reports provided and serviced by 19 major and serviced by 19 major and in this summary edit 20 airports in the study 1972 through 1975 for the civity for route segment ousy" and "dull" time in 196:59)	nnual Airline Delay Trends e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories: s arriving at each of the terval ("Busy" - 7:00 - 22:59,
This Report pu and groun most acti Delay ini ground da graph for	ablished since 1974 and delays for approve U.S. airports, formation as present a for each of the rm, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 -	these reports provided and serviced by 19 major and serviced by 19 major and in this summary edit 20 airports in the study 1972 through 1975 for the civity for route segment ousy" and "dull" time in 196:59)	nnual Airline Delay Trends e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories: s arriving at each of the terval ("Busy" - 7:00 - 22:59,  ts arriving at each of the
This Report pu and groun most acti Delay ini ground da graph for  (1)	ablished since 1974 and delays for approve U.S. airports, formation as present a for each of the man, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 -  Average airborne 20 airports, by "Average ground ti	c. These reports provided a command of the command	e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories:  s arriving at each of the terval ("Busy" - 7:00 - 22:59,  ts arriving at each of the ntervals.
This Report pu and grour most acti Delay ini ground da graph for  (1)  (2)  (3)  A table s	ablished since 1974 and delays for approve U.S. airports, formation as present at for each of the man, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 -  Average airborne 20 airports, by "Average ground ti arriving the 20 as showing the monthly	ch. These reports provided a command serviced by 19 major and serviced by 19 major and serviced by 19 major and serviced in this summary edit 20 airports in the study 1972 through 1975 for the civity for route segment ousy" and "dull" time in 106:59).  I delays for route segment busy" and "dull" time in 10:59).  I mes and delays for route irports, by "busy" and "average of airborne ar	e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories:  s arriving at each of the terval ("Busy" - 7:00 - 22:59,  ts arriving at each of the ntervals.
This Report pu and groun most acti Delay ini ground da graph for  (1)  (2)  (3)  A table s airport w	ablished since 1974 and delays for approve U.S. airports, formation as present at for each of the man, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 -  Average airborne 20 airports, by "Average ground ti arriving the 20 as showing the monthly	ch. These reports provided a command serviced by 19 major and serviced by 19 major and serviced by 19 major and serviced in this summary edit 20 airports in the study 1972 through 1975 for the civity for route segment ousy" and "dull" time in 106:59).  I delays for route segment busy" and "dull" time in 10:59).  I mes and delays for route irports, by "busy" and "average of airborne ar	nnual Airline Delay Trends e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories: s arriving at each of the terval ("Busy" - 7:00 - 22:59,  ts arriving at each of the ntervals. e segments departing and "dull" time intervals.  rival delays at a summary airports is also included.
This Report pu and groun most actin Delay ini ground da graph for  (1)  (2)  (3)  A table s airport w  17. Key words  Traffic A Airborne	ablished since 1974 and delays for approve U.S. airports, formation as present a for each of the man, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 - Average airborne 20 airports, by "Average ground ti arriving the 20 although the monthly which represents the extivity	A. These reports provided and serviced by 19 major and serviced by 19 major and serviced by 19 major at 20 airports in the study 1972 through 1975 for the sivity for route segment ousy" and "dull" time in 106:59).  Indeed a delays for route segment ousy" and "dull" time in 106:59).  Indeed a delays for route segment ousy" and "dull" time in 106:59).  The segment of the 20 study o	nnual Airline Delay Trends e estimates of block, airborne, ents connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and dy, displayed in both table and e following categories: s arriving at each of the terval ("Busy" - 7:00 - 22:59,  ts arriving at each of the ntervals. e segments departing and "dull" time intervals.  rival delays at a summary airports is also included.
This Report pu and groun most acti Delay ini ground da graph for  (1)  (2)  (3)  A table s airport w  Traffic A Airborne Ground Ti	ablished since 1974 and delays for approve U.S. airports, formation as present a for each of the man, for the years 1  Total traffic act 20 airports by "b "Dull" - 23:00 - Average airborne 20 airports, by "Average ground ti arriving the 20 althowing the monthly which represents the activity Delays	A. These reports provided and serviced by 19 major and serviced by 19 major and serviced by 19 major at 20 airports in the study 1972 through 1975 for the sivity for route segment ousy" and "dull" time in 106:59).  Indeed a delays for route segment ousy" and "dull" time in 106:59).  Indeed a delays for route segment ousy" and "dull" time in 106:59).  The segment of the 20 study o	mnual Airline Delay Trends e estimates of block, airborne, ments connecting 20 of the or domestic scheduled air carriers. tion consists of airborne and ddy, displayed in both table and e following categories: s arriving at each of the terval ("Busy" - 7:00 - 22:59,  ts arriving at each of the ntervals.  e segments departing and "dull" time intervals.  rival delays at a summary airports is also included.  Stotement  MMENT IS AVAILABLE TO THE U.S. PUBLIC RMATION SERVICE, SPRINGFIELD, INIA 22161

Form DOT F 1700.7 (8-72)

Reproduction of completed page authorize

407:082

			. 1			*1	rì			**					in.					
	i														• •	•				:# <u>- 1</u> 8:
c Monsures	]	aches	, į	į		Separate inches	Service miles	ţ		***	1		fluid sances	ı	-	cabic yands			Interesture	000
ions from Metri	Mettiply by LENGTM	9.0	2:	:	AREA	9.16	2:	2	MASS (weight)	9:03	12	VOLUME	8:		R 9	2	TEMPERATURE (039C1)	9.5 (800	(X =	02 120 20 120 120 120 120 120 120 120 12
Approximete Conversions from Metric Mossures	# 1. Y . I . K	millimeters continueters		Liferences	1	Square continuetors	square hildraters	hectares (10,000 m²)	=		townes (1000 kg)	1	multititers		cubic maters	cubic meters	TEMPE		1 amparature	300
	į	£ 5		5		<b>B</b> 7	. "5	2		. :	۲.		ī.	-	_ ~E	<b>~</b>				* o 1 00
ez	zz   12   02	61	•		,,,	1		• c				01		nden	2	19				
1777	Lalla.	ויין	""	ייייןי י	1,1,1,	"	ļ'''	ויןייו	' '''	171	ןיין	ןייןי י	ala.	]]]    ,	"	'l'	" " "	ן"ין	171	1 .nches
	į		5	5 . 5		7	7.		,		<b>3</b> .			1 1		-	.77			,
-	!		Continuetors	Continuents maters hildmeters		Sealers continuedan	Square meters			•	-		- International	mallidaters.	•	•	Cubic meters		Į	· Prince of the control of the contr
a to Motor	1		17	222	AREA	:	6.0		MASS (weight)		*:	VOLUME	•	. 2	0.24	2.0		TEMPERATURE (010C1)	-	
Approximente Commercia	1	1	•	11		1	,		•	•	1		1	fluid meters	• 1	1		TEMPE		
	i		•	. 7.1		•	2	**						2:			123			

Airline Delay Trends, 1972 through 1975 is a highlight edition of the three annual Airline Delay documents published in 1974, 1975, and 1976. These annual reports provide estimates of block, airborne, and ground delays for approximately 325 route segments connecting 20 of the most active U.S. airports, and serviced by 19 major domestic scheduled air carriers.

The data were derived by merging two comprehensive airline data bases - the Civil Aeronautics Board ER-586 Service Segment data, providing monthly totals of airborne and block operational times for all flights flown in scheduled service, and the Official Airline Guide (OAG) data, providing schedule information for all flights flown by certificated airlines. A combination of these data sources produced block, airborne, and ground delay data by route segment, airline, aircraft type and scheduled departure or arrival time.

ground taxi times were estimated in much the same manner as the nominal a route segment in excess of a strictly defined nominal time represent. route segments are based upon a search of the actual Civil Aeronautics Delays are defined in the study as the actual operational time on shown in this and the annual reports, as well as the alternative defi-Board (CAB) records of airborne times for the index year 1972, and the nitions for the appropriate nominal standards considered by the study, selection of the best or lowest average airborne time recorded in one a discussion of the statistical methods used in estimating the delays nominal selections for ground times in both the departure and arrival directions at the study's major airports are shown on-Table 1.3. For ground times achieved at each airport in 1972. The nominal airborne ing a standard of good performance. The airborne standards for all airborne times, based upon the best average monthly performance of times selected as the standard of good performance for each of the month for an individual flight. The nominal departure and arrival route segments included in the study are shown on Table 1-2. The the reader is referred to the summary Volume I of "Airline Delay Trends" report for 1972-1973. (Report No. FAA-EM-74-11).

It is important for the reader to note that the delays reported in this report are not related to the scheduled time published in the

route were, in fact, only 1-minute better then those of its competitors. route. Delay data for individual airlines and route segments are to be this report would indicate a 1-minute improvement in actual performance reduction in scheduled times for a given route when compared to a com average operational times experienced by Continental airlines on this Using OAG as the reference time, Continental would be found to have a times for Continental compared to the other airlines serving the same ments in operational times compared to scheduled times may be due to 19-minute delay from its schedule. However, the delay data shown in OAG. Scheduled times are unreliable indicators of delays. Improvefound in the three Annual Airline Delay documents published for the years 1972, 1973, 1974, and 1975. The data in this report contains changes in the schedules and not to an improvement in performance. addition, schedules may differ for airlines serving the same route petitors listing in the OAG. The CAB record may indicate that the segment. Continental Airlines, for example, may show a 20-minute summary information only.

Delay information as presented in this highlight edition consist of monthly airborne and ground data for each of the 20 airports included in the study, displayed in both table and graph form, for the years 1972 through 1975, for the following categories:

- (1) Total traffic activity for route segments arriving at each of the 20 airports by "busy" and "dull" time interval ("Busy" 7:00 22:59, "bull" 23:00 06:59).
- (2) Average airborne delays for route segments arriving at each of the 20 airports, by "busy" and "dull" time intervals.
- (3) Average ground times and delays for route segments departing and arriving the 20 airports, by "busy" and "dull" time intervals.

A table showing the monthly average of airborne arrival delays at a summary airport which represents the total of the 20 study airports is also included.



## TABLE OF CONTENTS

		PAGE			PAGE
CHAPTER I		1 Table II-14 (a-c) Figure II-14	(a-c)	MSY4	42,43
Table 1-1	Major Arrorts and Air Carriers Included in Study	2 Table 11-15 Figure 11-15	(a-c)	ORD	44,45
Table I-2		3-12 Table II-16 Figure II-16	(a-c)	PHI.	46,47
Table I-3	Arrival Ground Times	H-17 H-17	(a-c)	PIT	48,49
Charlek II	Monthly Summaties of:  a. Traffic Activity b. Airborne Delays c. Departure/Arrival Ground Times	Table II-18 Figure II-18	(a-c)	SEA5	50,51
Table II-1 (a-c) Figure II-1	ATL16	16,17 Table II-19	(a-c)	SF0 S	52,53
Table II-2 (a-c) Figure II-2	BOS18	18,19 Table 11-20 19 Figure 11-20	(a-c)	STL 5	54,55
Table II-3 (a-c) Figure II-3	CLE	20,21 Table II-21 Figure II-21	(a-c)	ALL AIRPORTS 5	56,57
Table II-4 (a-c) Figure II-4	DAL 2.	22,23 23,23			
Table II-5 (a-c) Figure II-5	DCA	24,25 25			
Table II-6 (a-c) Figure II-6	DEN	26.27			
Table II-7 (a-c) Figure II-7	DTW	28,29			
Table II-8 (a-c) Figure II-8	EWR	30,31			
Table II-9 (a-c) Figure II-9	JFK 3	32,33			
Table II-10 (a-c) Figure II-10		34,35			
Table II-11 (a-c) Figure II-11	LGA 3	36,37			
Table II-12 (a-c) Figure II-12	MIA 3	38,39 39			
Table II-13 (a-c) MSP		40,41			

## CHAPTER 1

Chapter I consists of three tables:

- Table 1-1 MAJOR AIRPORTS AND AIR CARRIERS INCLUDED IN STUDY .
  lists the major airports and air carriers included in the study.
- Table 1-2 NOMINAL AIRBORNE TIMES FOR ROUTE SEGMENTS displays the nominal airborne times for both jet and propeller aircraft for all route segments included in the study, listed by departure airport. Nominal times are defined as the lowest time recorded during some month in the index year of 1972. For those route segments which originated after 1972, the index year is shown as the year in which the service originated. The inter-airport distance is shown along with the month in which nominal time actually occurred.
  - Table I-3 NOMINAL DEPARTURE AND ARRIVAL GROUND TIMES displays the nominal ground times for departure and arrival at each of the airports included in the study. Nominal times are defined as the lowest time recorded during some month in the index year of 1972.
- Delays are actual recorded times in excess of nominal time.

TABLE 1-1 MAJOR AIRPORTS AND AIR CARRIERS INCLUDED IN STUDY

William B. Hartsfield Atlanta International	Cleveland - Hobkins International	Dallas/Fort Worth	Washington National	Denver - Stapleton International	Detroit Metro	Newark (New Jersey)	John F. Kennedy International (New York	Los Angeles International	La Guardia (New York City)	Miami International	Minneapolis/St. Paul International	New Orleans International (Moisant)	O'Hare (Chicago)	Philadelphia International	Greater Pittsburgh	Seattle/Tacoma International	San Francisco International	Lambert - St. Louis International	
		9.																	
ATL	CLE	DEW	DCA	DEN	DIM	EWR	JFK	LAX	LGA	MIA	MSP	MSY	ORD					STL	
-:	: 15	4	s.	.9	7	8	6	10.	=	12.	13.	14.	15.	16.	17.	18.	19.	20.	
			<b>9</b> ./	/:•	<b>,</b> .	7	7	7	è	7	;	) · •	3	·	ATL BOSS BOSS BOSS BOSS BOSS BOSS BOSS BOS	ATL BOS CLE DFN a./ DCA DCA DCA DTN DTN DTN DTN DTN DTN DTN DTN DTN DTN	ATL CLE CLE CLE DFW a./ DCA DCA DCA DCA LAX LAX LAX MSP MSP MSP MSP MSP MSP MSP MSP MSP MSP	ATL BOSS BOSS BOSS BOSS BOSS BOSS BOSS BOS	· •

a./ Annual reports for the years 1972-1973 include data for DAL, Dallas/Love Field

AIRLINE NAME	Allegheny Airlines, Inc.	American Airlines, Inc.	Braniff Airways, Inc.	Continental Air Lines, Inc.	Delta Air Lines, Inc.	Eastern Air Lines, Inc.	Frontier Airlines, Inc.	Air West, Inc (Hughes)	Mohawk Airlines, Inc.	National Airlines, Inc.	North Central Airlines, Inc.	Northeast Airlines, Inc.	Northwest Airlines, Inc.	Ozark Air Lines, Inc.	Pan American World Airways, Inc	dmont Aviation,	Southern Airways, Inc.	Texas International Airways, In	Trans World Airlines, Inc.	United Air Lines, Inc.	Western Air Lines, Inc.
AIRLINE	AL	AA	BN	00	DI	EA	FL	RW	MO	NA	NC	NE	NW	20	PA	PI	SO	11	TW	UA	WA
ATRLI	1.	2.	3.	4	5.	. 9	7.	8	9.	10.		12.	13.	14.	15.	16.	17.	18.	19.	20.	21.

b./ Delay data for specific airlines do not appear in this summary volume. Please refer to reports for individual years for this information.

NOMINAL AIRBORNE TIMES\* DEPARTING ATL

NOMINAL AIRBORNE TIMES DEPARTING BOS

ROUTE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TINE	DATE YR/NO	NOMINAL PROP TIME	DATE YR/MO	ROUTE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TIME	DATE YR/MO	PROP TIME	DATE YR/MO	
ATL	808	346	1:50	7201			808	ATL	946	2:07	7208	3:35	7203	
ATL	ae	154	1:13	7201			808	CLE	563	1:19	7205			
ATL	PAL	121	1:29	7203	2:36	7205	BUS	75	1551	3:23	7209			
ATL	DCA	547	1:07	7212			808	DCA	399	0:59	7210	1:30	7204	
ATL	DFE	731	1:35	7404			808	NEN	1766	3:57	7208			
ATL	DIN	565	1:18	7203			808	DP.	1991	3:35	7407			
ATL	EWR	745	1:27	7212	2:10	7202	808	DTW	632	1:29	7205			
ATL	JFr.	760	1:26	7207	2:46	7208	808	EWR	201	0:40	7210	0:40	7212	
ATL	LAX	1946	3:36	7204			808	JFK	187	62:0	7203	95:0	7202	
ATL	164	19/	1:31	7212	2:10	7202	808	LAX	2611	5:36	7206			
ATL	MIA	585	1:15	7209	1:59	7204	808	LGA	185	0:30	1121	9:38	7209	
ATL	NSP	906	1:59	7207			808	MIA	1258	2:32	7202			
ATL	MSY	425	0:57	7203	1:34	7204	808	MSP	1124	2:40	7205			
ATL	ORD	909	1:15	7204	5:19	7205	808	MSY	1367	5:59	7209			
ATL	PHL	999	1:17	7212			808	ORD	198	1:48	7211			
ATL	PII	526	1:10	7203			808	PHL	280	0:45	7210	1:24	7204	
ATL	3F0	2139	4:26	7207			808	FIT	496	1:15	7204	2:05	1121	
ATL	STL	484	1:06	7207			BOS	SEA	2496	5:46	7208			
							808	SFO	2704	5:48	7205			
							808	STL	1046	2:21	7206			
	-		A	THE THE										

"Airborne Times ("wheels off" to "wheels on")

TABLE I-2 (Continued)

NOMINAL AIRBORNE TIMES DEPARTING CLE

NOMINAL AIRBORNE TIMES DEPARTING DCA

BOUTE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TIME	DATE YR/ND	NOMINAL PROP TIME	DATE YR/NO	ROUTE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TINE	DATE YR/ND	PROP TIME	DATE TR/ND
CLE	ATL	554	1:19	7202			DCA	ATL	547	1:19	7208	2:07	7205
CLE	808	563	1:04	7204			DCA	808	388	0:53	7204	1:10	7212
CLE	7	1015	80:2	7206			DCA	CLE	310	0:50	7208		
CLE	20	310	0:47	7201			DCA	MTO	405	1:05	7205		
ar	DEN	1213	2:42	7208			DCA	EWR	199	0:31	7212	0:36	7202
ar.	NAO	1021	5:15	7407			DCA	JFK	213	0:37	7202		
CLE	160	98	0:18	7202	0:24	7209	DCA	LGA	214	0:29	7211	0:38	7201
CLE	ENR	404	0:57	7201			DCA	MIA	920	1:59	7210	3:05	7206
CLE	JFK	425	1:00	7201			800	MSP	931	5:05	7205		
CLE	K	2053	4:27	7208			200	ORD	612	1:22	7207		
Q.E	164	418	0:49	7207			DCA	FE	120	0:24	7203	0:27	7201
CLE	MIA	1080	2:20	7206			DCA	PIT	502	0:35	7204		
CLE	MSP	622	1:30	7205			DCA	STL	911	1:39	7205	2:41	7203
CLE	MSY	126	2:18	1157									
CLE	ORD	316	0:50	7206									
CLE	¥	363	0:50	7202									
CLE	PIT	105	0:15	1121	92:0	7209							
C.E.	SFO	2912	4:45	1121									
CLE	STL	487	1:06	7208									

TABLE 1-2 (Continued)

NOMINAL AIRBORNE TIMES DEPARTING DEN

NOMINAL AIRBORNE TIMES DEPARTING DEW

DATE	2																	
NOMINAL	יאטר יוחב																	
DATE	7402	7402	7402	7410	7411	7412	7402	7407	7412	7402	7411	7412	7412	7412	7403	7410	7406	7402
NOMINAL	1:27	3:05	2:03	1:31	1:54	2:37	2:36	2:27	2:41	2:11	1:53	0:51	1:34	2:30	2:08	3:47	3:09	1:11
DISTANCE	731	1991	1021	645	987	1372	1391	1235	1388	11211	852	447	802	1302	1901	1660	1465	550
SEGMENT	111	808	CLE	DEN	WIO	EWR	JFK	LAX	LGA	MIA	MSP	WS.	ORD	PHL	714	SEA	SFL	STI
ROUTE	DFW	DFW	DFW	DFW	DFW	DFW	DFW	NEW	DFW	DFW	DFW	DFW	DFW	DFW	DFW	N-40	DFW	DFW
DATE VR/MD																		
- W																		
NOMINAL PROP TIME																		
DATE NOMINA		7201	7262	7412	7212	7212	7201	7201	7201	7312	721.2	7201	7310	7208	7206	7210		
	7201	2:15 7201																
DATE VR/NO	3:19 7201		1:21	1:23	5:05	2:58	3:07	1:50	1:21	2:15	1:41	2:57	2:41	2:17	2:04	1:34		
NOMINAL DATE	1766 3:19 7201	2:15	654 1:21	645 1:23	1135 2:05	1617 2:58	1638 3:07	849 1:50	693 1:21	1067 2:15	900 1:41	1570 2:57	1302 2:41	1019 2:17	856 2:04	781 1:34		

TABLE I-2 (Continued)

		NOM	NOMINAL AIRBORNE TIMES DEPARTING DIW	NE TIMES DTW					NOMINAL A DEPAR	NOMINAL AIRBORNE TIMES DEPARTING ENR	ES			
ROUTE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TIME	DATE YR/MD	NOMINAL PROP TIME	DATE YR/MD	ROUTE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TIME	DATE YR/MD	NOMINAL PROP TIME	DATE YR/NO	
DTW	ATL	595	1:19	7202			EWR	ATL	745	1:34	7201	2:34	7203	
MO	808	632	1:17	7201			EWR	808	201	0:24	7210	0:36	7201	
MIO	CLE	98	0:23	7209	0:23	7205	EWR	CLE	404	1:06	1211			
MIO	PAL	386	2:12	7207			EWR	DAL	1365	5:49	7208			
DIA	DCA	405	0:59	7204			EWR	DCA	199	0:34	7205	0:45	7208	
UTA	DEN	1135	2:32	7204			EWR	DEN	1617	3:30	7205			
MIC	DFW	196	1:57	7407			EWR	DFW	1372	3:07	7407			
MIN	EWR	488	1:03	7212			EWR	MTO	488	1:15	7208			
DTW	JFK	509	1:03	7201			EWR	JFK	12	90:0	7204			
T	LAX	1979	4:09	7208			EWR	LAX	2454	5:06	7208			
UTW	LGA	105	20:1	7210			EWR	MIA	1086	5:16	7212	3:32	7312	
DIA	MIA	1146	2:18	7209			EWR	MSP	1008	2:35	7203			
MIO	MSP	829	1:15	7205			EWR	MS1	1167	2:34	7208			
MIO	MSY	926	1:55	7208			EWR	ORD	617	1:32	7203			
MIN	ORD	235	0:38	7205			EWR	PHL	80	0:51	7205	0:27	7210	
DIM	PHL	454	1:01	7203			EWR	PIT	319	0:50	7205	1:19	7205	
MIG	PII	10.2	0:33	7208			EWR	SFO	5957	5:40	7203			
DTW	SFO	2079	4:28	7206			EWR	STL	872	1:56	7205			
DIN	STL	440	1:09	7206										

TABLE 1-2 (Continued)

DATE YR/ND				7204													7209		
NOMINAL PROP TIME				3:35													1:16		
DATE YR/NO	7202	7209	7210	7212	7208	7403	7210	7204	7212	1121	7210	7202	7205	7210	7212	7208	7204	7212	
NOMINAL JET TIME	3:37	4:35	3:54	2:20	1:40	2:23	3:42	4:10	4:33	4:18	3:01	3:06	3:14	4:27	4:03	1:58	0:46	5:59	
DISTANCE ST. MILES	1946	1192	2053	1246	849	1235	6261	2454	2475	2342	1535	1670	1744	2405	2136	954	338	1592	
SEGMENT	ATL	808	CLE	DAL	DEN	DFW	MIO	EWR	JFK	MIA	MSP	MSY	ORD	PHL	PIT	SEA	SFO	STL	
ROUTE	r.	Ę	LAX	LAX	LAX	K	LAX	LAX	LAX	LAX	LAX	LAX	Ä	LAX	LAX	LAX	LAX	LAX	
DATE YR/MO											7201					7308			
NOMINAL DATE PROP TIME YR/MD											4:10 7201					1:23 7308			
	7210	7208	7205	7206	7203	7206	7407	7202	7210	7202	4:10	7205	7208	7205	7204	1:23	7205	7208	7206
NOMINAL PROP TIME			1:07 7205								7209 4:10					7203 1:23			
DATE NOMINAL YR/MD PROP TIME	1:32	0:21		2:57	0:40	3:37	2:58	1:19	0:11	5:05	2:14 7209 4:10	2:20	2:29	1:45	91:0	0:42 7203 1:23		4:49	
NOMINAL DATE NOMINAL JET TIME YR/MD PROP TIME	760 1:32	187 0:21	1:07	1383 2:57	213 0:40	1638 3:37	1391 2:58	603 1:19	11:0 12	2475 5:05	1090 2:14 7209 4:10	1029 2:20	1182 2:29	740 1:45	94 0:16	340 0:42 7203 1:23	2421 5:23	2586 4:49	892 2:05

TABLE 1-2 (Continued)

TR/ST

5	NUMINAL AIRBORNE TIMES Departing Lga	LGA LINES					NOMINAL AIRBURNI DEPARTING 1	TING I
DISTANCE ST. MILES	NONLINE JET TINE	MAN AND AND AND AND AND AND AND AND AND A	NOMINAL PROP TIME	DATE YR/NO	ROUTE	SEGMENT	DISTANCE ST. MILES	NOMIN JET TI
19/	7:38	7203	2:35	7207	MIA	ATL	595	1:1
185	0:56	7212	0:35	7201	AIM	808	1258	2:5
418	1:03	7205			MIA	GE	1080	2:5
1381	2:53	7208			MIA	R	1110	2:5
214	0:29	7208	0:40	7204	MIA	80	920	1:5
1388	3:05	7411			MIA	DFN	1121	2:3
105	1:14	7208			MIA	MP.	1146	2:2
=	0:11	7202			MIA	EWR	1086	2:1
1096	2:20	7206	4:10	7202	MIA	JFK	1090	7:0
1020	2:18	7203			MIA	ž	2342	4:3
1183	2:41	7208			MIA	5	9601	2:1
733	1:31	7210			MIA	95	1501	3:20
8	0:59	7209			MIA	MSY	675	1:2
335	0:52	7210	1:19	1121	MIA	080	1178	2:3
88	2:01	7209			MIA	PHL	101	2:0
					MIA	PIT	1013	2:0
					MIA	SFO	2585	5:1
					MIA	STL	1068	2:2

7207

DATE NICHTANL D
YR/ND PROP TIME Y
7210
7210
7209
7209
7209
7209
7209
7201
7209
7201
7209
7201
7209
7201
7209
7201
7209

7201

3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

TABLE 1-2 (Continued)

	DATE YR/ND	7204			7209														
	NOM: WAL	1:26			1:36														
83	DATE	72:1	7211	7512	7212	7309	7406	7207	1121	7205	7208	1121	7210	7204	7211	7202	7206	7205	
NOMINAL AIRBORNE TIMES DEPARTING MSY	NOMINAL JET TINE	95:0	2:40	2:03	0:56	2:22	1:00	5:00	5:09	2:15	3:31	2:13	1:23	1:46	61:2	1:50	3:57	1:21	
NONINAL A DEPAR	DISTANCE ST. MILES	425	1367	126	437	1067	447	926	1167	1182	1670	1183	675	837	1088	816	1161	109	
	SEGMENT	ARL	808	CLE	8	DEN	DFW	<b>M</b>	EWR	JFK	Ř	2	MIA	ORD	F	P11	SFO	SIL	
	ROUTE	¥	HSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	MSY	
	9																		
	DATE YEAR														7209				7304
	NOMINAL DATE														1:20 7209				1:51 7304
TIMES		7204	7212	7202	7201	1121	1112	7406	7202	7212	7201	7206	7212	7202	1:20	7212	7205	7205	
AL AIRBORNE TIMES EPARTING MSP	NOMINAL PROP TIME	1:58 7204		1:18 7202											7204 1:20				7208 1:51
NOMINAL AIRBORNE TIMES DEPARTING MSP	DATE NOMINAL YR/MO PROP TIME	1:58		1:18	1:48	1:52	1:32	1:50	1:13	2:05		3:18	2:01	3:15	0:43 7204 1:20	2:00	3:04	3:27	7208 1:51
NOMINAL AIRBORNE TIMES DEPARTING MSP	NOMINAL DATE NOMINAL JET TIME YR/MD PROP TIME	906 1:58	2:14	622 1:18	853 1:48	931 1:52	693 1:32	852 1:50	528 1:13	1008 2:02	1029 2:02	1535 3:18	1020 2:01	1501 3:15	334 0:43 7204 1:20	981 2:00	1399 3:04	1589 3:27	448 1:03 7208 1:51

TABLE 1-2 (Continued)

		NOM	NOMINAL AIRBORNE TIMES DEPARTING ORD	E TIMES					NOHINAL AI DEPART	NOMINAL AIRBORNE TIMES DEPARTING PHL	S			
MIE	SEGMENT	DISTANCE ST. MILES	NOMINAL JET TIME	DATE YR/ND	NOMINAL PROP TIME	DATE YR/MO	ROUTE	SEGMENT	DISTANCE ST. MILES	NONTINAL JET TIME	DATE YR/ND	NOMINAL PROP TINE	TRA'ND	
8	AFL	909	1:07	7209			¥	ATL	999	1:14	7207			
80	808	867	1:36	7206			¥	808	280	0:36	7210	1:38	1121	
RD	CLE.	316	0:38	7203			¥	CLE	363	0:57	7205			
80	N N	799	1:35	7204			F	18	1295	5:46	7208			
3	20	612	1:13	7202			¥	DCA	120	0:25	7208	0:37	7203	
8	N30	006	1:57	7206			PHE	DEN	1570	3:33	7207			
980	DEN	802	1:38	7411			F	DFW	1302	2:43	7405			
RO	MG.	535	0:31	7201			¥	MTO	454	1:10	7205			
980	EIR	917	1:24	1121			¥	EWR	18	9:18	7210	0:56	7212	
RD	JFK	740	1:27	7202			F	JFK	93	0:21	7206			
8	LAX	1744	3:35	7212			¥	×	2405	90:5	7208			
8	5	733	1:26	7212			PH	191	8	0:25	7202			
8	MIA	1198	2:23	7203			F	MIA	1014	5:05	7210			
98	MSP	334	0:51	7208	1:1	7208	¥	MSP	086	2:18	7205			
NRD NRD	MSY	837	1:47	7205			PHL	MSY	1088	2:25	7208			
3	F	879	1:51	7201			£	ORD	678	1:36	7207			
980	PIT	412	9:54	7202	1:31	7211	¥	PIT	268	0:43	7205	1:05	7208	
8	SEA	1720	3:43	7208			¥	SFO	1252	5:31	7208			
8	SFO	1846	3:53	7208			PHI	STL	814	1:55	7207			
6	5	250	0.30	7205	1 06	200								

TABLE 1-2 (Continued)

A STATE																			
PROP TIME																			
TRATE	7209	7204	7203	7411	7201	7204	7204	7204	7203	1121									
NOMINAL JET TIME	4:57	3:18	2:05	3:18	4:31	1:54	2:42	3:14	1:23	3:11									
DISTANCE ST. MILES	2496	1669	1019	1660	2421	954	1399	1720	879	1709									
SEGNENT	808	7	DEN	OFW	JFK	LAX	#SP	ORD	SFO	STL									
ROUTE	SEA																		
DATE YR/ND		7307	7204						7209	7305		7211			7209	7211		7303	
NOMINAL PROP TIME		1:51	0:32						1:17	1:24		1:09			1:43	1:00		1:59	
DATE YEVED	7207	7201	7212	7201	7202	7308	7408	7206	7201	7204	7207	1121	7212	7202	7208	7210	7205	7206	
NOMINAL JET TINE	1:09	1:09	0:15	5:09	0:33	2:54	2:18	0:35	0:50	0:46	4:36	99:0	5:00	1:59	1:04	0:33	4:53	1:22	
DISTANCE ST. MILES	526	984	105	1961	502	1302	1067	102	319	340	2136	335	1013	918	412	568	2254	553	
SEGNENT	AR	808	aE	3	8	DEN	140	-	ENR	JFK	LAX	16	MIA	NS.	ORD	F	SFO	STL	
ROUTE	TI4	PIT	PIT	PIT	114	114	PIT	PIT	PIT	FI	PIT	PIT	PIT	PII	PII	PIT	PIT	TIA	

TABLE I-2 (Continued)

w <b>9</b>	2															_		3			
PATE YR/ND	730				7203											7201		7303			
PROP TINE	T: 35				2:12											1:08		5:03			
PATE YEAR	7204	7201	1201	7212	7208	7208	7406	7202	7201	7201	7212	7204	7210	7207	7206	1121	7201	7201	7208	7208	
NOMINAL JET TINE	1:04	1:58	95:0	7:7	1:28	1:48	1:15	0:55	1:45	1:49	3:20	1:50	2:13	1:05	1:24	0:38	1:37	1:08	3:40	3:46	
DISTANCE ST. MILES	184	1046	487	946	911	181	920	440	872	892	1592	88	1068	448	109	258	814	553	1709	1736	
SEGMENT	ATL	808	ar	26	2	DEN	DFN	16	ENR	JFK	r.	5	MIA	MSP	MSV	ORD	F	FIT	SEA	SFO	
ROUTE	STL	SIL	STL	STL	STL	STL	ST.	ST	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	
TR/NO										7201											
NOMINAL PROP TIME										1:13											
TR/ND	1121	7201	7209	7209	7202	7409	7201	7209	7204	7212	7204	7201	7210	7204	7201	7203	7206	7210			
NOMINAL JET TINE	4:00	4:58	4:11	5:49	1:49	2:43	3:51	4:45	4:30	94:0	4:56	5:56	3:39	3:25	4:42	4:22	1:24	3:15			
DISTANCE ST. MILES	2139	2704	2912	1476	956	1465	5079	2565	2586	338	2585	1589	1161	1846	1252	2253	879	1736			
SEGNENT DISTANCE ST. MILES																P1T 2253					
	AR.	808	370	8	DEN	DEN	NIO	ENR	JFK	*	MIA	<b>M</b> SP	MSY	980	¥		SEA	STL			

TABLE 1-3
NOMINAL DEPARTURE AND ARRIVAL GROUND TIME \*

DEPARTURE ARRIVAL																				
ATRPORT	ATL	BOS	CLE	DCA	DEN	DFW	DTW	FWR	JFK	LAX	TCA POT	MIA	MSP	NSY	ORD	PHI	TII	SFA	SFD	-

ALL TIMES ARE IN MINUTES

"Ground Times (Taxi times, including holding, to and from the ramp)

# CHAPTER II. MONTHLY SUMMARIES

Chapter II consists of three tables and one bar graph for each of the 20 airports.

- Tables II-1 (a,b,c) through Tables II-20 (a,b,c) display 1972 through 1975 monthly summary data for the following categories:
- a. Traffic Activity
- b. Arrival Airborne Delay
- c. Departure/Arrival Ground Time.

The data are given for both the "busy" and "dull" time inter-

- Figure II-1. through Figure II-20 display the 1972 through 1975 monthly departure/arrival ground time data in bar graph form.
  - Summary data of the above categories are given for the entire system in Tables II-21 (a,b,c) and Figure II-21.

### NOTE

The Port Authority of New York/New Jersey did not supply the average hourly departure and arrival ground times for the three New York airports, Kennedy, La Guardia, and Newark, for the months of November and December, 1975. These data were essential to the statistical model\*devised to generate an accurate series of ground times in both the departure and arrival direction for each of the 20 airports included in the study. Therefore, estimates for the 1975 average ground times are not shown for these two months.

\*See description of study methodology, referenced on title page.

900 - 101 | 172 | 173 | 174 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | TINTHLY SUMMARY OF AIRHORNE OFLAYS ARRIVING AT ATL 1701 138 1100 001, 1100 001 100 001 10 FROM 19 STUDY AIRPORTS FROM 19 STUDY AIRPORTS 5125251335555 TABLE 11-1 (b) 121111111111 444444444

TIMES ARE IN HOURS AND WINUTES ---

MONTHLY SUMMARY OF TRAFFIC ACTIVITY ARRIVING AT ATL

TABLE 11-1 (a)

NON NONTHLY AVERAGES FOR BUSY VS. DULL INTERVALS FUR AIRPORT ATL DEPARTURE/ARRIVAL GROUND TIMES BY MONTH NOMINAL DEPARTURE GROUND TIME = 8.00 MIN NOMINAL ARRIVAL GROUND TIME = 4.00 MIN TABLE 11-1 (c) FIGURE 11-1 מאאכמא סאסטאט טאים אי בראטרשט 

---- ALL TIMES ARE IN MINUS AND MINUTES----

	1975	סחרו	173	3	1	-				175	187	165	• 0.	1822			1975	DOLL	6010	0110	0110		0110				0110	0110	0112	0110
	İ	<b>808</b>	3500	1500	307	2013	215	11.34		3444	3300	3870	3330	42017			-	9034	010	9010	0105	010		1110	6010	0107	0107	010	0110	0108
															1 808															
	1074	סתר	-	•	111		21	2:	230	187	100	236	207	1728	IVING A		1974	שוור	010	9010	9010	0:01			6010	0111	6010	0111	0:11	0010
PROM 10 STUDY AIRPORTS	Ī	903v	2136	3570	1955		3543	1906	4113	3638	3636	3874	1624	40847	LAVS AR	RPORTS	1	BUSY	9010	0100	90:0	90:0	90:0	60:0	010	90:0	9010	0:01	0101	0:0
FROM 19 STUDY AIRPORTS															INRNE DE	FROM 19 STUDY AIRPORTS														
10 HO		٠,		~	0		= :		2 2	2	00	-	21	•	OF A1RE	40m 10 8	:	7.	03	60	10	60	90	24		50	0.1	90	80	10
•	1973	מחר	103	2	2	Σ.	*		. =	2	180	2	26	2	SUMMARY	-	197 3	AUSY DULL	0103	010	0110	60:0	9010		010	0105	0107	9105	0:08	20
	Ī	¥608	3268	2005	4563	1183		2018	1000	4137	3882	3891	3385	47470	MONTHLY SUMMARY OF AIRBORNE DELAYS ARRIVING AT 803		-	BUSY	9010	9010	010	9010	4010		6010	8010	6010	0107	0:01	90:0
	1	סחרר	183	**	•	***	218		3116	261	101	585		2643				סיינר	0110	0111	0112	0110	5110	9110	0110	0010	8010	90:0	1010	0110
	1972	BUSY	1810	1313	4729	1000		097		101	\$000	4545	3651	52848			1972	Bust	0100	0100	0111	0100	0113		6010	6010	1010	1610	9010	010
			384	658	***		444	1	7		net	NUN	230	TOTAL	TABLE 11-2 (b)				344	654		464	***		Aug	SFP	ענו	NUN	DEC	Tofai
															TABL															

TABLE 11-2 (c)

MINTALY AVERAGES FOR BUSY VS. BULL INTEDVALS FOR APPORT BUS DEPARTUREZARRIVAL GROUND TIMES BY MONTH

		-				1	•			1				1975		
	14 PA	S JOIL THAN S	1704	APRIVAL S	UE PAU	SHOPES	ARBIV	ALS	SPPAR	TURES	ARRIV	41.5		TURES	ARRI	
	ASIIH	D:#1	4084	MILL	HUSY		HUSY	סייננ	AUSY	טייור	HUSY	מחרו	HUSY	Durt	BUSY	DINE
	01:0		9:03	0102	0:11	9:14	0:04	9010	0110	0:14	4010	0102	9010	0107	910	010
	11:0	0:11	0110	2010	0:10	0:15	0:04	0:04	0111	0:11	010	2010	0110	0010	9010	010
	01:0	0:15	\$6:0	20:0	0110	0:15	5010	0:04	010	0:12	0:05	0103	0010	0000	5010	0.0
	96:0	11:0	50:6	20:0	0:11	0:15	0:04	0:04	010	8010	50:0	1010	010	0110	0105	010
***	00:0	4:12	9:03	0:05	0:11	0:10	0:04	90:0	W0:0	0111	90:0	2010	0010	6010	9010	010
2	0000	1113	1010	20:0	0:11	21:0	0:04	0:03	6010	0110	5010	2010	0110	0110	9016	010
1	01:0	11:0	10:0	20:0	9116	0:11	50:0	90:0	0:10	90:0	5010	9105	0111	9010	9010	010
90	01:0	0110	70:0	0:04	0:12	9:11	5010	50:0	010	0110	9010	010	.010		9010	010
	0110	0:11	9:04	50:0	0:11	0:10	5010	90:0	9010	0110	90:0	0102	010	0000	5010	0.0
-	01:0	6113	3:05	0:04	0:12	0:12	2000	9010	8010	00:0	92:0	5010	6010	6010	9010	010
2	0110	11:4	5010	90:0	0:11	0:12	0104	0104	0010	10:0	90:0	010			•	•
,	11:0	0:13	4:05	0:04	0:11	0:11	80:0	20:0	010	90:0	90:0	0103	•			•
11.1	01:0	4:12	4:04	0:03	0:11	0:15	50:0	3030	0010	0016	9010	0103	6080	9010	9010	9102

NOMINAL ARRIVAL GROUND TIME = 2.00 MIN

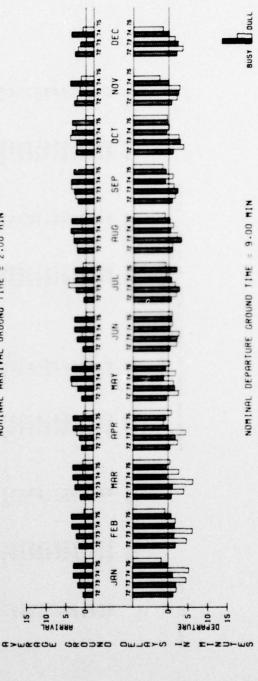


FIGURE 11-2

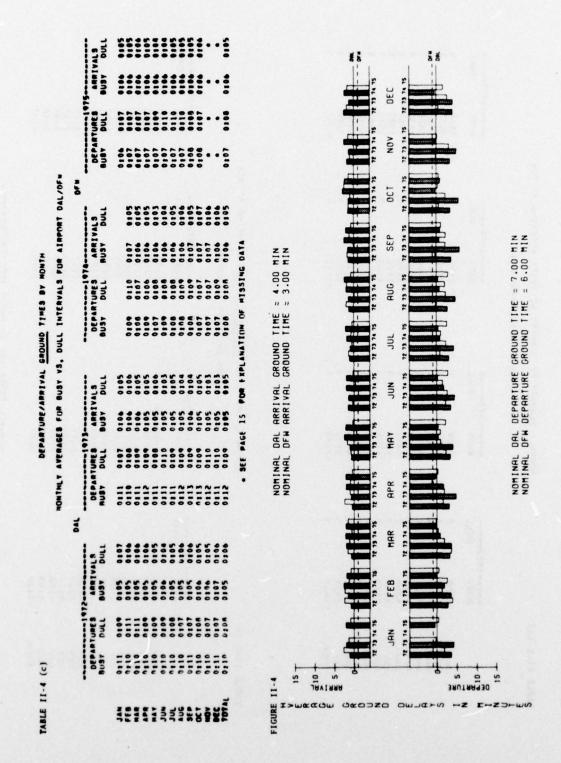
4746744444 CONTHLY SUMMANY OF TRAFFIC ACTIVITY ARRIVING AT CLE CONTHLY SUMMARY OF ATHHORNE DELAYS ARMIVING AT CLE 346300000000000 TIMES ARE IN HOURS AND MINUTES ---FROM 19 STUDY AIRPORTS FROM TO STUDY ATRACHTS 2001-1-1-2000 2001-1-1-2000 2001-1-2000 2001-1-2000 2001-1-2000 2001-1-200 222222222222 H197 DUL. TABLE 11-3 (b) TABLE 11-3 (a) JAN JUL JUL JUL NOVY OFC 46141414144

TABLE 11 -3 (c)

DEPARTURE/ARRIVAL GROUND TIMES BY MONTH MONTHLY AVERAGES FIR BUSY VS. DULL INTERVALS FOR AIRPORT CLE

1-3  NON-INFERENCE OF THE PARTY NAME AND	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  NOMINAL DEPARTURE GROUND TIME - 7.00 MIN  NOMINAL DEPARTURE GROUND TIME	c	ARTUR	S ARRIVALS	ARRIVALS	DEP	DEPARTURES		1418	DEPA	DEPARTURES	DEPARTURES ARRIVALS	VALS	DEPA	DEPARTURES ARRIVALS	ABRIVALS	874
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINA	NOMINAL DEPARTURE GROUND THE = 7.00 HIN N	308	IA DOLL	808	סוור	803	מתר	ACON	Dane	4608	1100	9031	מחרר	1608	חתר		170
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL GROUND TIME = 3.00 MIN  NOMINA	S  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  Bussy  Substitute  Su	010	. 010 B	010		010			5010	9010	010	9010	9010	*010	• • • •	9105	9010
NOMING RESIDENCE OF THE PROPERTY OF THE STORY OF THE STOR	100 0100 0100 0100 0100 0100 0100 0100	010	0110	0103		0110			9010	8010	0111	9010	0110	010	910	*0:0	•
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL GROUND TIME = 3.00 MIN  NOMINA	S  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  Buss  Bus	010		1010		010			5010	9010	1010	5010	9010	1010	010	9105	•
NOMINAR REPLY ALTERNATES THE STATES THE STAT	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  Bussy  Bu	010	-	010		6010		0103	010	010	9010	5010	9105	9010	::	9115	:
NUMINAL REPART HAY JUN JUL AUG SEP OCT NOV PROPERTY REPARTS RE	SEPTIONS OF THE RESIDENCE OF THE STATE OF TH	010	011	9010		010		9610	6010	9010	010	9105	9010	0107	•0:0		0:0
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL ARRIVA	150 0100 0100 0100 0100 0100 0100 0100	9.0	010	010		010		5010	9010	0107	0107	0105	0 0 0	9010	0100	9115	:
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL GROUND	15	0.0	0.0	0.0		0010		1010	9100	9010	0107	5010	9010	9010	9010	9010	910
15	S  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  BUST  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  BUST  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  BUST							40.0	40.0		2000	40.0	0107	40.0			
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINA	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  Bust								2000	0.07	2000	40.0	90.0	40.0		9010	
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL ARRIVAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL ARRIVA	SEPARTURE GROUND TIME = 7.00 MIN  BUST										1000	4				9105	
NOMINAL ARRIVAL GROUND TINE = 3.00 MIN  NOMINAL ARRIVAL GROUND TINE = 3.00 MIN  SEE PAGE 15 FUR HARMANTON OF HISTORY MINISTRAL DATA  NOMINAL ARRIVAL GROUND TINE = 3.00 MIN  SEE PAGE 15 FUR HARMANTON OF HISTORY MINISTRAL STATUS  SEE	SAME FEB MARK APPRILATE GROUND TIME = 3.00 MIN  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  BUST					9000			90.0	90.0	2000	40.0	40.0		•	•	
33  NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL GROUND TIM	31 NOMINAL DEPARTURE GROUND TIME = 3.00 MIN 80ST																•
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL GROUND	15  NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL DEPARTURE GROUND TIME = 7.00 MIN  BUST			0.00					40.0	2000	0.01	40.0	0107	40.0	0107	9010	0.07
NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  RANGE STATES TO THE	15  15  16  17  18  18  19  19  19  19  19  19  19  19	;				•	•	PAGE 15	FUR EXPL	ANATION O		ING DATA					
JAN FEB HAR APR HAY JUN JUL AUG SEP OCT NOV	JAN FEB HAR APR HAY JUN JUL AUG SEP OCT NOV 15 15 15 15 15 15 15 15 15 15 15 15 15	n -					NOMINAL	ARRIVA	L GROUND	11	3.00 #	Z.					
THE MARK APPRINGS TO THE	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV																
190 SEP MAR APR MAY JUN JUL AUG SEP OCT NOV 201 SEP OCT NOV 20	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV																
JAN FEB MAR APR MAY JUN JUL RUG SEP OCT NOV 201 10 10 10 10 10 10 10 10 10 10 10 10 1	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV		5 - 1								7	7 - [		5	-	5	
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV		-												T	-	1
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV 201 1231.115 7231.115	•					1010				997- 997-			_			1
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV  12.11.11.15. 72.11.11.15.		7 27 27 27					2737475	27 27 87 37	27 27 87 37	12 73 74					27 27 27 37	
200 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	E S S S S S S S S S S S S S S S S S S S		JAN	FE			PR	MAY	NOC	JUL	AUG				NON	DEC	
SAUTRA 30	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN		:					2 73 74 75	72 79 74 75	72 73 74 75	72 73 74	72	15			27 27 27 27	
3 N U T N P G 20 N P C S C S C S C S C S C S C S C S C S C	IS NOMINAL DEPARTURE GROUND TIME = 7.00 MIN											2000					1
S T T MAY 3 O	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN 80SY								mon mon		anna anna		ices.		1		
AUT MARY 300	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN 88UST	0					3									-	1
NUT 91 91 91 91 91 91 91 91 91 91 91 91 91	DE 15 15 NOMINAL DEPARTURE GROUND TIME = 7.00 MIN 80SY	35	3	•	-			3	}	3		,	5			•	
+ 01	15 - NOMINAL DEPARTURE GROUND TIME = 7.00 MIN 80SY		+													1	
- SI	IS	-	-														
ASIR	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN 80ST																
ASIR	NOMINAL DEPARTURE GROUND TIME = 7.00 MIN																
	NOMINAL DEPARTURE GROUND THE = 7.00 MIN														ASIIG	1 110	

		75	25.	1:	:	::		514	***	135	301					1975	שחרו	5010			9010					0000	2010	
		908v pnfr	2005	3060	3010	3218	101	3412	585	2437	3132	36515				*1	BUSY	•		1110	010	5010	0103	0105	5010	0000	0000	****
	***	DULL	•	32	250	5	202	392	340	36.	25	3618	THE AT DAL		. JO	-	מחרו		9000	5010	0105	0100	1010	0103	1010	1016	0103	
V AIRPORTS		AUSY DULL	0	2703	2608	3210	2880	3543	3072	3182	3167	32929	E OFLAYS APPIN	Y AIRPORTS		1974	HUSY			0110	9010	0:0	1010	00:0	9010	6010	0113	,
FROM 19 STUDY AIRPORTS		DULL		350	131	151		280	1	245	**	*102	HONTHLY SUMMARY OF AIMHIRME OFLAYS ARRIVING AT DAL/OFM	FROM 19 STUDY AIRPORTS			DULL	010	9010	010	9010	5010	1010	1010	2010	9010	010	
		101 101 DULL	24.50 24.50	3002	2554	5836	1146	35.65	5662	5962	2	33535	MONTHLY SUP			1073	HUSY	0115	110	0113	6010	1010	010	0:11	0410	•110	000	•
	140	PULL	712	:	**	255	£ .	362	162	262	351	3541			140		Thou	0110	20.0	9010	9010	5010	1010	0102	0101	0:00	0100	
		RIISY DULL	2742	2000	2755	2440	246	502	5292	2676	27.50	32946				1972	Aus.	0113	0000	0080	5010	5010	010	9080	010	0:12		
			***		•			YOU.	34.	34	100	foral	TABLE 11-4 (b)					JAN		100	.7.	4:	Tor.	36.0	130	AUN	10141	



---- ALL TIMES ARE IN HILLIPS AND MINITES----

### 0 295 0	À

DEPARTURES ARRIVALS
BUSY DULL BUSY DULL HONTHLY AVERAGES FOR BUSY VS. BULL INTERVALS FOR ATRPORT DCA DEPARTURES ARRIVALS BUSY DULL . SEE PAGE 15 FOR EXPLANATION OF MISSING DATA DEPARTURE/ARRIVAL GROUND TIMES BY MONTH NOMINAL DEPARTURE GROUND TIME = 9.00 HIN NOMINAL ARRIVAL GROUND TIME = 3.00 MIN DEPARTURES ARRIVALS RUSY DULL BUSY DULL ARRIVALS BUSY DULL DEPARTURES RUSY DULL JAN 15 + PRRIVAL 38UTAR930 TABLE 11-5 (c) FIGURE 11-5 MACZHI ZH MADLWO DECORO 

1 = 2 = 2 = 2 = 2 = E = E UNTHLY SUPHARY IN ATHRORNE DELAYS ARRIVING AT DEN FROM 19 STUDY ATRPORTS PROM 19 STUDY AIRPORTS 22.22 22.23 2570 105 2540 105 2540 105 2540 107 2541 105 2510 155 251 E\$\$\$\$\$\$\$\$\$\$\$\$ 2344631168441 TABLE 11-6 (b) TABLE 11-6 (a) 45444444

MONTHLY BUNHARY OF TRAPFIC ACTIVITY ARRIVING AT DEN

TONTHLY AVERAGES FOR BUSY VS. DULL INTERVALS FOR AIRPORT DEN DEPARTURE/ARRIVAL GROUND TIMES BY MONTH NOMINAL DEPARTURE GROUND TIME = 3.00 MIN NOMINAL ARRIVAL GROUND TIME = 2.00 MIN FEB NAC 38UT88930 TABLE 11-6 (c) FIGURE 11-6 OMODEO OMICEN -Z E-ZD-WO 

PUNTHLY SUMMARY OF

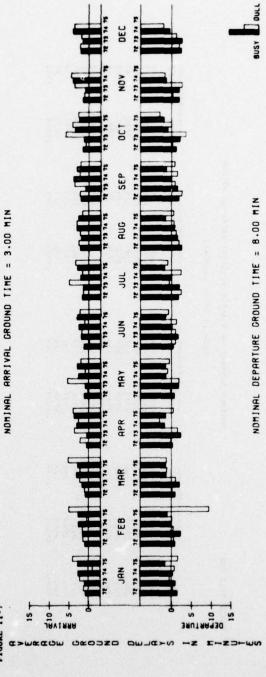
FIGURE 11-7 

ARRIVALS BUSY DULL FIRE EXPLANATION OF HISSING DATA DEPARTURES ARRESEUSY BULL BUSY DEPARTURES ARRIVALS BUSY DULL RUSY DULL SFE PAGE 15

SONTHLY AVERAGES FOR BUSY VS. DULL INTERVALS FOR AIRPORT OTH

DEPARTURE/ARRIVAL GROUND TIMES BY MONTH

TABLE 11-7 (c)



---- ALL TIMES ARE IN HOURS AND MINUTES----

	1975	שותר	15	1.1	41	67	5		102		•	11		1677				סהרו	0103	0103	0105	1010	500	0107	•	0103		5010	70.0
	-	HUSV	1752	2031	2141	2008	2311		2507	1740	1500	2188	1875	23850				BITSY	0103	*010	910	5010		.010	9010	***		010	40.0
	74	HUSY FULL	•	115	• * -	125		2.	2	155	124	111		1881	TYTHE AT ENR		10,	DULL		5010	010	90.0	5010	9010	0105	90.0	5000	5010	2010
STAPPORTS TO	61	AUSY	509	1858	5002	1980	1521	13/4	2318	1001	1443	1952	1636	20426	ME DELAYS APH	N AIRPORTS		HUSY	010	010	0:0	9010	6010	0110	0110	• • • • • • • • • • • • • • • • • • • •	2010	90:0	0:01
FROW 19 STUDY AJRPORTS	1	שחרו	•	170		111	- 180		120	104	7.	151	99	1540	MUNTHLY SUMMARY IF ATPRIRITE DELAYS APRIVING AT EAR	FRUM 19 STUUY AIRPORTS		DOLL	0:00	2010	90:0	1010	0105	010	9100	5010	0101	1010	10.0
	1973	RUSY	2444	2107	5145	2475	2706	6367	2754	7438	231A	1112	1058	50682	MUNTHLY SUM			H11SY	9100	0:00	010	9010	01.0	9010	010	010	5010	9100	0.07
		HILEA DIELL	181	17.4	203		242	•		146	165	152	117	2471				BUSY DULL	-0102	0102	0:05	5010	2010	7980	0:01	0100	10:0	1010	1010
	•	HI'SY	246	2504	2723	2573	2430	110	2587	7587	2611	2002	25.85	297				9037	9010	0105	0:01	0102	010		0101	1010	4010	0105	40.0
			, m	FFH	74.	700	***	<b>*</b>	A Paris	46.6	7.7	AUA	210	Total	TABLE 11-8 (b)				JAN	648	871		70%	Jul	Alic	35.0		230	TOTAL

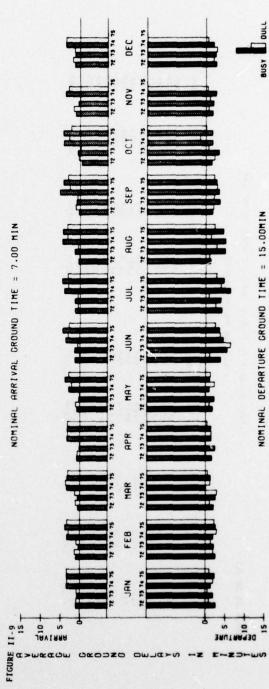
HANTHLY AVERAGES FOR BUSY VS, DULL INTERVALS FOR AIRPORT FUR NOMINAL DEPARTURE GROUND TIME = 9.00 MIN DEPARTURE/ARRIVAL GROUND TIMES BY MONTH NOMINAL ARRIVAL GROUND TIME = 4.00 MIN AUG JUL NOC HAY APR HAR FEB JAN FIGURE 11-8 TABLE 11-8 (c) OKODZO 

1975	סיינו	200	562	102	592	500	902	214	276	213	211	200	2000				1975	11110	010	010	010	010	010	0010		60:0	9010	010	0:0
	BUSY	1730	1000	1612	1601	5922	1935	1005	2401	1800	255		2000					8U8	0110	.010	1110	*010	0113	9170		0113	0111	•110	9110
191	שהלו	95	267	462	707	212	174	111	284	246	311		200	ĺ	IVING AT JPK		1974	סהרו	0010-	9105	0102	0107	010	2110		9010	010	9010	4010
	HISA	""	1960	1771	1010	1357	1207	1142	2002	1778	1344	0001	200		ME DELAYS ARK	FRIN 19 STUDY AIPPORTS	61	HUSY	0:10	0:11	9010	0:11	*1:0	110	0110	0110	0:14	0:11	1110
	חיונ	325	920	151	#0m	100	311	105	979	506	ċ				MINTHLY SUMMANY OF ALMHIPME DELAYS ARRIVING AT JEK	FROM 19 STU		מחרו	90:0	0:07	0111	0:07	60:0	6110	0107	0101	9010	0:03	5010
1973	48ma	1975	7885	2092	2440	2654	2467	7571	1928	2584	500		34503		MINTHLY SUP		1614	HIST	0:0	0112	0:14	0110	9110	03:0		0115	0111	9010	
	1 1000	536	627	104	*09	245	250	479	580									Date C	0104	0:0	0107	0:00	0110		50.00	0:07	9010	0:00	50:0
.1	PriSt mit	24.11	24/1	7447	7755	2712	1500	5412	2747	7655	2100						01	Thou ASIN	00:0	0:11	0:15	1110	6250				60:0	60:0	0:10
		384	***	444	664		340	31.11	100	340	131				TABLE 11-9 (b)				.46	619	440	100	**	2	700	36.0	יני	NO.	יונכ

TABLE 11-9 (c)

	**
	100001
HUNT.	200
DEPARTMETAPOINT GROUND TIMES BY MINTH	TATEBUALS
C GRIJIIND	
WE / AUDIVA	FUR HISY
0504010	ACATHLY AUFRACES FOR HISY VS. DILL TATEBOAR & COL ATUBORT 15.
	WINTH! Y

	PEPA	P. P. B. Tinof S	1444	2 147 144	OFPANTURES	10845	~	VALS	0.50	101	OF DATE OF A SECTION OF DESTREES				15	-
	4500	11.4	45110	Trac	P.JSY	The Asi	AGDE	טיירר	AUSY	חחום	AUSY	DOLL	RUSY	Dull	BUSY	PULL
:	4110	0:15	40:0	90:0	0117	4110	9:08	0:0H	41.0	0:17		01.0		****		
•	1111	0:17	3:38	#0:0	0:17	0:16	10:0	0:08	0.17							
*	0:17	.::	0:00	#0:0	6:17		90:0	010	31.0							
*	0:17	6:15	W. C.	90:0	11:0	0:15	0:07	10:0	41.0	4::0				2112		
***	4117	41:0		7:3A	0:17	0:15	10:0	6:37	91.0	0111						
	1:10	0110	9:04	0:07	0210	0:51	0:00	0:08	0110	0:10	0111	0:10				
1	0110			4010	0110	91:0	90:0	90:0	0:51	6::0	0:11	9:10	0.20			
96	41:0	91:0	0107	4010	0150	41:0	80:0	W:08	0250	0:14	21.0					
	0:17	0:17	4:01	40:4	0110	0:17	W0:0	#0:0	8110	9110	2110	0110				
-:	41:0	0117	10:0	0107	0:18	9110	90:0	0:07	0117	41.0			2110			
34	1111	41:0	90:0	50:0	0117	4110	0:01	0107		51.0					:	
3	0110	6117	0:00	00:0	0:17	0:1H	#U:0	80:0	0:17	41:0						• •
1441	":17	41:0	1:08		0:18	0:17	W0:0	90:0	9:17	0:17	0:11	0:10	0.18	•110	0111	



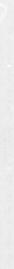
8540 572 8540 572 8540 572 8540 671 8540 671 8540 671 8540 671 8570 6 WOMINLY SUMMANY OF TUAFFIC ACTIVITY APPLIANG AT LAX THE SUMMERY OF ATRECIONE DELAYS ARRIVING AT LAX HISY DILL HISY OF STATES O BHISY DILL BHO 164 1267 576 1267 576 1267 576 1267 576 1417 577 1417 577 1417 157 1417 157 1418 157 1418 547 1507 725 1716 547 1717 547 1718 25.55.25.25.25.55 FROM 19 STUDY AIMPONTS STANGELL VOURS 91 544444444 544444444 544444444 3435555555555 100 M TABLE 11-10 (b) TABLE 11-10 (a) 44444

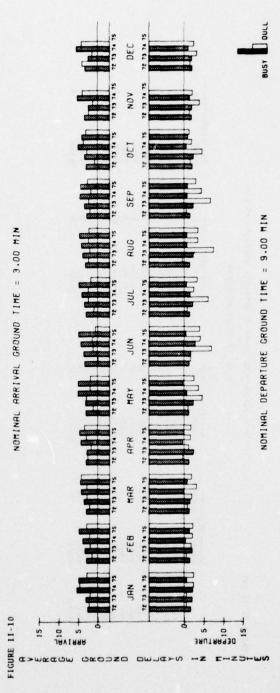
TABLE 11-10 (c)

DEPARTURE ZARRIVAL GRIUND TIMES RY WONTH

-
3
3
_
-
INPORT
C
3
-
•
~
6
104
50
-
4
>
0
INTERVAL
-
-
-
-
5
OULL
5
>
-
=
FIR HUSY VS.
2
-
AVERAGES
-
C
-
Œ
-
-
*
A TELNU
T
-
2
C

		2101				61				6			-	61	15	
	DEPAL	S toil to	APPT	870	04 PAG	STOPES	VINCA	874.	DEPAR	TUNES	APRIV	ALS	DEPAI	RTURES	APPT	INTE
	HIST	HASA DOLL	AUST	Thio ASA	HUST	DULL	HUSY	HUSY DULL HUSY DULL	HUSY	DULL	HUSY DULL HUSY DUL	מחרר	6USY	BUSY DULL BUSY	BUSY	מחרו
,	1110	0:10	90:0	90:0	0:11	0110	90:0	50:0	0:11	0111	0108	9010	0110	0111	9010	010
1	0110	01:0	0:00	50:0	0:11	0:11	90:0	5010	010	0:11	0:01	0105	0110	0111	0108	0:0
24.	01:0	0110	40:0	0:05	01:0	0:11	1010	9010	00:0	0:12	0:07	9010	0110	0111	0107	0107
•	0110	60:0	90:0	4:06	0:11	01:0	90:0	50:0	6010	0:11	10:0	9010	6010	0111	0010	010
	0110	01:0	9010	0:04	0:11	0:14	9010	90:0	0:10	0:13	0010	0105	6010	0:12	0108	5010
	01:0	1110	3:06	\$0:0	0:11	0:16	10:0	0:04	0:12	0:13	0:07	4010	60:0	0113	0:08	010
-	61:10	01:0	40:0	0:04	0:11	0:15	99:0	90:0	0110	0:11	0107	5010	0110	0112	9010	5010
9	9110	00:0	90:0	40:0	0:11	0:15	10:0	50:0	0110	0:13	0101	5010	0110	0:13	80:0	5010
•	0110	0:10	9010	3:05	9:11	0:16	0:00	0:05	0110	0:13	010	5010	0110	0112	0107	0:0
-	0:11	0:11	93:0	0:04	0:11	0:14	9010	90:0	0:10	0:11	9010	101	0110	0110	0107	0
	0:11	0:10	90:0	3:05	0:11	0:13	5010	0:04	0110	0:11	9010	1010		•		•
,	0:11	0:11	90:0	0:07	0:11	0112	50:0	0:05	0110	0112	6010	2010				•
Til	0:11	0110	40:0	50:0	0:11	1:15	90:0	0:05	0110	0112	8010	9010	0110	0:15	W010	0:0





HUSY DULL -IN.THEY SUMMARY OF THAFFIC ACTIVITY ARRIVING AT LGA CONTHEY SUMMARY OF ATHHORNE OFLAYS APRIVING AT LUA BUSY DULL FROM 19 STUDY ATRPORTS FROM 19 STUDY AIRPORTS -32424 - 645 - 426 00000 00 000 BUSY DULL .... 1977 Per 1 20121 TABLE 11-11 (a) TABLE 11-11 (b) 

\*\*\*

....

---- ALL TIMES ARE IN HOURS AND MINUTES.

TABLE 11-11 (c)

DEPARTURE SARRIVAL GROUND TIMES BY MONTH HONTH HONTHLY AVERAGES FUR BUSY VS. BULL INTERVALS FUR AIRPORT LEA

		01	72			101			******	61	74			(61		****
	DE PARTING	S tonte	APPIVALS	VALS	DEPAR	TUBES	AHRIV	878	DEPAR	TURES	ARRI	IVALS	DEPAR	PTURES	THE	879
	AUST	711.0	ACON	חוור	HUSY DULL	סחרר	BUSY DULL	סחרו	#034	סחרו	Ansk	סחרו	903Y	DULL	100	DOC
-	9115	40:0	9:05	010	4116	0111	9010	010	0:13	0110	6010	0110	•	===		:
	9115	0:10	5010	0:00	0117	0:11	3010	5010	.110	0:11	9010	9110		9115	000	:
**	1115	00:0	50:0	0:00	9110	1110	90:0	90:0	0113	0111		0110	0113	0110	•	:
20	1115	0:08	5086	70:0	0110	9110	5010	5010	9114	0110	9010	9010	0113	0110		:
	4115	0:11	5010	0:05	0:17	0113	5010	0105	0110	1110	6010	.010	0110			-
NO	0110	0110	9110	0:00	0122	0:17	9010	5010	0115	0:11	9010	9113	0110	0111	•	0:0
הר	0110	01:0	90:0	0100	0:16	0:11	0105	5010	0116	0111	9010	1110	9110	1110		
25	2110	40:0	90:0	2010	0:18	0115	9010	0105	9110	0115	010	*010	0115			0:0
4	0115	0112	9110	0:00	0:15	4110	5010	5010	4117	0116	010	0:13	0115	.010	0000	110
-	4116	0110	96:0	0:04	9115	9110	5010	010	9110		8010		0110		0107	
10	1116	1110	9010	0:05	1110	0110	5010	010	0115	6010	6010	.010	•	•	•	•
EC	0:15	9:11	0:00	0:05	0110	0:12	5010	9010	9110	0:12	010	0110	•	•		•
1014	0:15	01:0	9:00	+0:0	0117	0113	5010	5010	9119	0112	9010	0107	.110		010	1110
					•	SFF PA	51 454d	FUR FIFT	OR FEDIANATION OF	18	ATAS DATA					

EB HAR APP JUN JUL AUG SEP OCT

C>MCCOM OCODED DWJC>0

NOMINAL DEPARTURE GROUND TIME = 8.00 MIN

FIGURE 11-11

ONTHLY SUMMERY OF ATHHORNE DELAYS APHIVING AT 19 STUDY AIRPORTS 1073-1105 2310 2310 2310 2310 2310 134 134 137 137 137 137 137 00111 00111 00101 00101 00101 00101 00101 00101 

WINTHLY SUMMARY OF TRAFFIC ACTIVITY ARRIVING AT MIA

HINTHLY AVPOAGES FIRE HUSY VS. DULL INTERVALS FOR ATRPORT HIS DEPARTURE JARRIVAL GROUND TIMES BY MINTH NOMINAL DEPARTURE GROUND TIME = 7.00 MIN 0107 0 NOMINAL ARRIVAL GROUND TIME = 2.00 MIN 30000000000 HAR FEB JAN TABLE 11-12 (c) FIGURE 11-12 380188430 SMHCZHI Z- SHIND GZCONG WODNMCI 

	1975	1100	150	101		100	144	152	120		~	- 2	135	1799				5/61	סחרר	0:05	0105	0102	-0101	1010		-010-	-0100	-0103	0000	
		4034	1978	8002	****	2120	1961	6102	5102	5000	1006	1001	1936	23335				Ī	8084	9010	\$010	5010	010	2010			2010	0101	010	
	1	סחרו	•	124		::	7.6		216	207	214	50	•=	1232		VING AT MSP			שהרר		0103	1010	2010	9010	,,,,,	0010-	0010	1010	0105	2010
FHOW 19 STUDY ATHRONTS	1974	HUSY	174	1764	1080	3701	1111	2511	2246	2057	2136	583	109	17163		POLTHLY SUMMARY OF ATMHORNE DELAYS ABRIVING AT MSP	UDY AIMPORTS		<b>B</b> (134	0104	010	9010	010	0105	2010	1010	0102	•010	0103	5010
FACH 19 ST		Doct	170	511	243			: 3	555	161	761	502	15.	2360		WART OF ATHRO	FH0= 19 STUDY		DOLL	0:01	0:00	9105	2010	2010	10:00	1010-	0010	0010-	-010-	9101
	1973	HISA	1873	1003	19.56	1869	5002		22.55	1602	2120	2150	1002	16652		MONTHLY SU			ASAH	*0:0	10:0	2010	0105	0105	1010		10:0	0105	9010	010
		DOLL	148	717	210	512			200		175	110	175	7000					1 hnd ASAB	20.0	20.0	0101	0010	1010-	-010-	50.00	-0105	1010-	0101	10:01
	1972	*S	1442	2057	1111	2117	***	***	1371	1086	1741	2005	1961	21430	;	-			B.: 5.4	40.0	50.0	0:00	0:04	10:0	10:0	10:0-	0:0-	0103	8010	6010
				669	07.	041		THAT.				AU .				TABLE 11-13 (b)							400		Jun	101		100	AUN	טני

AVERAGES FIRE HUSY VS. BULL INTERVALS FOR AIRPORT MSP DEPARTUMES ARMINALS
HUSY DULL BUSY DULL FIRE EXPLANATION OF MISSING DATE DEPARTURE LARRIVAL GROUND TIMES BY MONTH NOMINAL DEPARTURE GROUND TIME = 5.00 MIN NOMINAL ARRIVAL GROUND TIME = 2.00 MIN DEPARTURES AMIVALS
RUSY DULL HUSY DULL DEPARTMENTS AND VALSE
HIGH PART PHE JAN TABLE 11-13 (c) 11-13 38UTM8930 JAVIANA Ö N 12 SATURATION ORCORD DEPARTMENTS -X E-ED-MA 4514444444

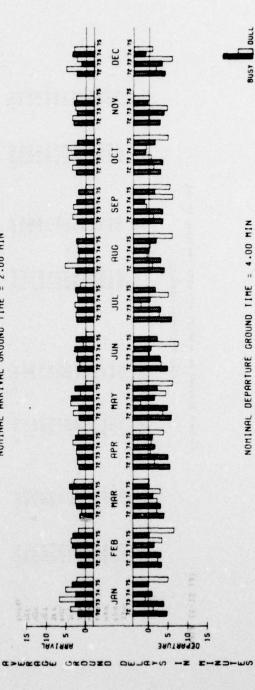
47.				1001	19 57004	19 STUDY A18PORTS			
	-1015-	!	-	1973		1	1974	•1	,
	YS1-4	Out.	HUST	Tho		91134	שחרר	ausy out	100
	30	150	410			181	60	•	
	214	151	686	123		1120	115	1224	•
	154	167	1011	- 20		1137	~	1502	
		150	1045	120		10 50		1220	•
			1135	-		1354	• • • • • • • • • • • • • • • • • • • •	1372	-
	25	101	1110	150		1210	:	1981	•
	780	136	1043	100			••	1107	•
	22	661	11.18	137		1232	101	1300	=
21			0001			973	102	1000	•
			1053			1052	104	107.	-
	1997		1001	134		121	101	1726	•
	00	==	113	:		•==	::	1030	
TOTAL 155	4654	1074	12370	1015		13156		16532	
TABLE 11-14 (b)			-0-T-LV	SUMMARY OF	AIMHIIANE	DEL AYS ARK	THE THE SUMMERT OF STREETS OF STREETS OF THE STREET		
				F 0114	10 57110	FOUR 10 STILLY ATURDED			
•	1972	:		1971					
04	HUSY	1110	HUSY	סחרו		BUSY	DULL	A006	1
	0100	60:0	9010	5010		00.0	•		
		9010	010	0105		0107			
		9010	9010	0:07		9010	010		
		5010	010	0107		0105	0107	0107	
		8010	0:01	9010		0103	0103	5010	
		0:05	-010-	0010		010	5010	0103	010
		00:0-	-0103	-0103		0103	*010	0103	010
		10:0-	-0:0-	-0100		010	•010	0103	0:0
110	•	00.0	1010-	0105		9300	0112	010	0:0
		2010	1010-	1010		2010	5010	5010	
1000			2010	9010		5010	•010	0107	0 . 0
			9010	2110		0:08	0110	0101	:
			1010	010		5010	0101	1010	:

TABLE 11-14 (c)

MINITHLY AVERAGES FOR BUSY VS. DULL INTERVALS FOR ATRPORT MSY DEPARTURE / ABRIVAL GHOUND TIMES HY HONTH

										1		-		1	15	•
			-	STALL STALLS	DEPA	DEPARTURES	-	VALS		STUBES	104	IVALS	DEPAI	RTUBES	APPI	877/
	4034	נארו	4500	סהרו	AiiSY	מהרו	ALISA	Dut	403Y	סהורו		חחר	BUSY	DULL	BUSY	DOLL
	0610	5010	010	40:0	90:0	56:0	5010	010	5010		90.0	0107	90.0	00.0		
	1630	90:0	9500	0:05	6117	010	0:05	0100	9010	0107	5010	4010	40.0			
	9104	4010-	8010	0103	0101	90:0	010	50:0	5010	10:0	50.0	50.0				
	0010	40:0	9000	20:0	6010	50:0	*010	0:04	40.0	10.0		50.0				
***	0110	#U:0	9194	50:0	60:0	0102	0:0	90:0	9010		40.0	20.0			5000	0 0
	6080	40:0	0104	9010	1010	4:04	2010	0104	10:0	9111	5010	2010	40.0		5000	
	0110	0:07	90:0	50:0	0:01	2010	9010	5010	90.0	60.0	40.0	40.0				200
	90:0	50:0	9:05	0:07	10:0	0:00	0.00	9010	0.00	0000					5000	
	90.0	5000	0.04	50.0	40.0	20.0		30.0					00:0	-	010	0
									6 10	01:0		2010	0105	60:0	*0.0	0:0
	1110	6:02	5010	9010	8010	50:0	0:00	9010	5010	5010	5019	0107	0105	.010	9010	0.0
	4.801	2000	50:0	90:0	90:0	6010	9010	50:0	010	010	5010	90.0		•		
	9:08	0:00	0100	10:0	3:07	0:10	5 J T O	9010	10:0	9:05	9010	5010		•		• •
=	00:0	90:0	90:0	5010	0:08	010	0:04	0:05	9100	0:01	5010	5010	0105	0010	5010	010





5.5

FIGURE 11-14

---- ALL TIMES ARE IN HININS AND MINUTES ---

1975	DOLL	740				***		:	858	•••	288	181	i				1100	010	.010	010	1010	5010	5010	20.0	0:05	9110	9010	•
-	903v	7607	101	***		4725	4713	8782	7050	1259	7002	••••					603	210	0115	0117	1110	9115				•::•	9110	0115
1974	סחרו	178	=			10.5		•	757	7.0	959	625	Į	MIVING AT 1180			ממנו	***	9010	•010	9010	9100	8010		0010	1010	9010	0107
Ī	ASII A	2215	9699	7364	****	225	1961	8950	1137	1706	1111	5 I W9	<b>S</b>	HUNTHLY SUMMERT OF ALRHOWNE DELAYS ARRIVING AT 1180	STUDY AIRPORTS		103	41.0	8110	• 1:0	0115	•:•	51:0	22.0	0150	0117	•110	6110
	שהרו	M20	-	556		1000		1084	806	405	745	\$14	1	DUNARY OF AIR	FROM 19 STUDY		DOCE	50:0	8010	9010	9010	0103	5010		• • • • • • • • • • • • • • • • • • • •	910	0:01	9010
Ī	A1:34	7145	1653	4200	1655	25.		8878	7669	7487	.300	6381	26405	#ONTH V			808	•	0177	0113	0112	0110	1110		2110	0111	0110	.1:0
	butt	932	~~	1005	3	1001	•	426	25	472	437	151	•				מורר	5080	50.0	9:05	50:0	0103	010		10:0	5010	50:0	0:0
	H::SY	7904	1014	9594	*	8788		1000	7365	7985	A332	7.73	988				ASIII	1				.010	•			9113	0121	0112
		740	-	::	•	*	4			120	*0*	ישננ	Tofa	TABLE 11-15 (b)				4		:	***	4	3	911		20	290	TOTAL

MINTHLY SUMMARY OF TRAFFIC ACTIVITY ARRIVING AT ORD

TABLE 11-15 (a)

FUNTHLY AVENAGES FOR BUSY US, BULL INTERVALS FIRE ATREMET ORD DEPARTUMES ARRIVALS
HUSY DULL BUSY DULL DEPARTURE JARNIVAL GRUUND TIMES HY MINTH NOMINAL DEPARTURE GROUND TIME = 9.00 MIN NOMINAL ARRIVAL GROUND TIME = 5.00 MIN AUG -----DEPARTURES ARRIVALS
RISY DALL RISY DULL nepatrues apprais \*\*\*\*\*\*\*\*\*\*\*\* JAN D N FIGURE 11-15 0 CECTE OF STEMS ORCORD 4514444444

TABLE 11-15 (c)

34-10074563444 MINITALY SUMMADY IN TUAFFIC ACTIVITY ARRIVING AT PHI THE SUMMARY OF ATRHORNE DELAYS ANSIVENS AT PHE FROM 19 STUDY ALLPONES 19 STLDY AIRPORTS IN HUURS 1136 177 254 1 141282241111 TABLE 11-16 (b) TABLE 11-16 (a) 

NON and all others one of all others of the 100 STITH Y AVERAGES FOR HUSY VS. DULL INTERVALS FOR ATROOMT PHL SEP DEPARTURE / AMMINAL GOUIND TIMES BY MINTH NOMINAL DEPARTURE GROUND TIME = 7.00 MIN NOMINAL ARRIVAL GROUND TIME = 2.00 MIN AUG JUL DEPARTURES APPIVALS
BUSY DULL AUSY DULL NOC PERENTIALS ABUTVALS
HISY OULL HISY FULL FEB JAN TABLE 11-16 (c) FIGURE 11-16 PRRIVAL 38UTA6930 12 S- מ≺ברשם סצכסשט

---- ALL TIMES ARE IN HOURS AND PINUTES ---

DUSY DULL	•	2	=	::	==	•	•	•	•	•	2			1975	שחרר		-0100	-0101	2010-								-0101
	200	3003		5	5652	2005	3433	2107		2000	36780			Ī	AS06	***		0105	010			010	0103	0103	0103	5010	•010
Busy Dull	•	•	•		•	•	*	•	• •		<b>=</b>	HINTHLY SUMMARY OF A <u>FRRURNE</u> OFLATS ARRIVING AT P2T		1978	שוורר	9016						8010	1010				9080
1	*	2870	2573	2406	1007	1001		1550	2000	1340	32342	E DELATS ARI	T AIRPINETS	Ī	RUSY	010	9000	0:03	0103		010	0:01	6010	0107	0107	0:01	4010
1700		~	98	=	**		15	63	~:		: •	THE AFREGRA	FROM 19 STUDY AIRPORTS	:	סחרו	5010	401	50:	503	2010	-0:01	2010	0101	0103	0103	0:01	\$010
HUSY DULL				1571	112	1254					00101	THLY SUPHARY		1679	HUST DE					90.0	•						
												P						•	•								
1972 DULL			2		200				•					1972	IA DULI						010						
4608					366						1. 36879	17 (6)			HUSY						010						
		15	***	=	***		Aug	98.0	ובי	2	1414	TABLE 11-17 (6)				745		41	407			AUG	Sto	130	AUN	340	TOT

MONTHLY SUMMARY OF TRAFFIC ACTIVITY ARRIVING AT PLT

TABLE 11-17 (a)

00000 DEPARTURES ARRIVALS
RUSY DULL BUSY DULL ••• DEC 72 11 11 15 VON "THEY AVEHAGES FIRE BUSY VS. DULL INTERVALS FUR AIRPONT PIT DEPARTURES ARRIVALS HUSY DULL RUSY DULL 5010 27.11.12 SEP 72 13 13 15 15 DEPARTON L'ARRIVAL GHOIND TIMES AV MINTH NOMINAL DEPARTURE GROUND TIME = 2.00 MIN TENNES TE NOMINAL ARRIVAL GROUND TIME = 2.00 MIN DEPARTURES APHILALS
HUSY DIELE HUSY DIELE . SEF PACF 15 22.11.22 DEPARTMENTS AND DOLL JAN DEVIANA D 0 10+ FIGURE 11-17 380186930 Z- N-ELMO ONCONO

YABLE 11-17 (c)

FUNTHLY SUMMANY UF ATHROPHE DELATS ABRIVING AT SEA 00107 11000 14 STUDY AIMPORTS TABLE 11-18 (b) 454444444 2444444

MINTHLY AVERAGES FIR HUSY VS. DULL INTERVALS FOR AIRPORT SEA . SEE PAGE 15 FOR FXPLANATION OF 41551NG DATA NOMINAL DEPARTURE GROUND TIME = 6.00 MIN DEPARTURE / AMRIVAL GROUND TIMES BY MINTH NOMINAL ARRIVAL GROUND TIME = 2.00 MIN (c) (c) FIGURE 11-18 3AUT 86930 משאכנש טאכטאט משאמדים אב באבטרשט 

WONTHLY SUMMARY OF ATRBONNE OFLAYS APPLYING AT SFO HISY DULL

348 2001

4013 2640

4013 2640

4013 100

401 100

401 100

401 100

401 100

401 100

401 100

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 200

401 FROM 19 STUDY ATRPORTS FRUIT 19 STUDY ATURDETS HUST DITLE

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0

11.0 TABLE 11-19 (b) 45144444 4644444444

TIMES ARE IN MOURS AND MINUTES ---

MINTHLY SIMMARY OF TOAFFIC ACTIVITY ARRIVING AT SEO

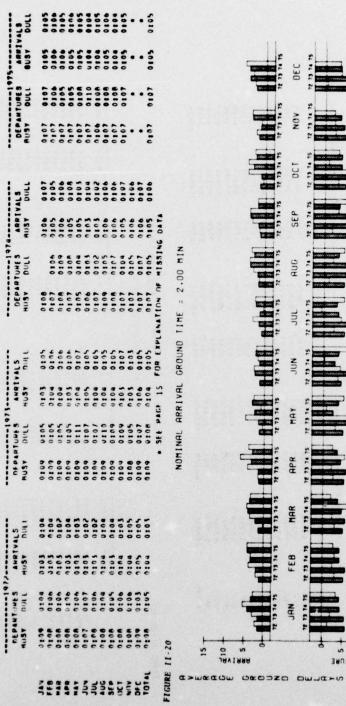
TABLE 11-19 (a)

FIGURE 11-19  FI	ABLE 11-19 (c)	-19 (c)				•	ONTHE Y	DEPA.	S FOR	DEPARTUREZARRIVAL GROUND TIMES HY MINITH HUNTH HUNTH AVERAGES FOR RUSY VS. DILL INTERVALS FOR AIMPORT SFO	DUND TIME	BVALS F	MTH 00 A 18	198 T SF.					
### FEB ### #### #######################																			1
		0.00		***	VALS		UFPAN	LUNES	ABHIV	41.5	04 6	STUBES	ARRI	146	961	PARTURE		RIVAL	
		9084	שחרו	RUST			HUST	טחור	HUSY	1700	RUSY	1100	4084	סיינר	800				1
THE TOTAL OF THE T	344	4:11	9:0	9:00	90:0		11110	0:00	90:0	9:00	0115	1110	010	010	010				:
NOMINGL DEPORTURE GROUND TIME = 8.00 MIN	FEB	0:11	00:0	3105			21:0	0100	4:05	0:04	0010	00:0	9010	010	110				:
10   10   10   10   10   10   10   10	**	0.11	0:00	4036			11:0	60:0	5010	9000	0010	9010	9010	0103	0.11				*
1	***	9111	0:0	0:05			9:11	80:0	5010	0:04	6010	010	000	*010	010				105
ELI-19  NOTITION OF THE STATE O	***		0:00	9:05			0112	8010	0:04	9010	0110	0:10	0107	.010	0110				:
E III-19  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN	704	1110	0010	5010			2310	01:0	50:0	2010	0110	\$110	5010	*010	0110				
EII-19  NOTITION OF THE	306	9:12	80:0	50:0			21:0	60:0	5010	10:0	0111	0:11	0107	9010	110				105
EII-19  NOTITION TO THE STATE OF THE STATE O	904	1110	0:0	50:0			2110	01:0	50:0	0105	0113	0110	9010	010					:
E III-19  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN	36.	0:12	0010	5010			2110	6010	5010	0103	0111	0010	9010	0103	110				:
E III-19  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN	130	0112	6010	3105			0115	910	50:0	0:00	0110	9010	2010	9105	0.1				
E III-19  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN  NOMINAL DEPARTURE GROUND THE = 8.00 MIN	ACM.	= :	0:0	1:05			2110	6010	0:0	0104	0110	6010	9010	5000	•	•			•
E III-19  NOMINAL ARRIVAL GROUND TIME = 3.00 MIN  SEP DATE  NOMINAL DEPARTURE GROUND TIME = 8.00 MIN  SEP DATE  NOMINAL DEPARTURE GROUND TIME = 8.00 MIN  SEP DATE  NOMINAL DEPARTURE GROUND TIME = 8.00 MIN	77.	::					211	000	2010	2010	0110	0000							
JAN FEB HAR APR HAY JUN JULE = 3.00 HIN  18.13.13.13.13.13.13.13.13.13.13.13.13.13.	•							244	91 99	A Idx 4 GO 3	NATTON OF		ATAG DETA						
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV D  2233033 723313 72331313 723313 723313 723313 723313 723313 723313 723313 723313 723													100						
JAN FEB HAR APR HAY JUN JUL AUG SEP OCT NOV DEPARTURE GROUND TIME = 8.00 HIN	FIGURE	61-11					Z	OHINAL	ARRIVE	AL GROUN	TIME		Z						
JAN FEB HAR APR HAY JUN JUL AUG SEP OCT NOV DOTTINE SENTING STREET SENTING SEP OCT NOV DOTTING SEP OCT NOV	1>																		
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEPARTURE GROUND TIME = 8.00 MIN	ma		_																
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV D	Œ																		
JAN FEB HAR APR HAY JUN JUL AUG SEP OCT NOV D	Sw																		
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV D  15.10.15.15.15.15.15.15.15.15.15.15.15.15.15.			-						1										
JAN FEB MAR APR MAY JUN JUL RUG SEP OCT NOV D  1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	<b>3œ</b>		-	1	H.											-	•	_	
JAN FEB HAR APR HAY JUN JUL RUG SEP OCT NOV D  ###################################	0=							1110			one one	-			-110				1
JAN FEB HAR APR MAY JUN JUL AUG SEP OCT NOV D  ###################################	2		13	72		27 37 67 3			27 11 27	27 27 27 57	72 75 74 75			27 27 87	27 27 87 57	7 57 67 57		70.75	1
EE OF 15 15 15 15 15 15 15 15 15 15 15 15 15	2		JAN		83:	MAR	AP	8	HAY	JUN	JUL	AUC		SEP	100	NON	90	J	
NOMINAL DEPARTURE CROUND TIME = 8.00 MIN	0		187			27 27 27 2			78 74 75	27 27 27 27	27 27 27 47					-	,		
NOMINAL DEPARTURE CROUND TIME = 8.00 MIN	د،									BBBB					1 1 1 1			2	1
OF THE CROUND TIME = 8.00 MIN	<b>4</b>																		
DEFINE CROUND TIME = 8.00 HIN	S	8			-									7					
IS TO NOMINAL DEPARTURE CROUND TIME = 8.00 HIN	-	38	-				-						1	L		-		_	
15 + 15 + NOMINAL DEPARTURE CROUND TIME = 8.00 HIN	2	UTI	_							1									
15 1 10 11 NOMINAL DEPARTURE CROUND TIME = 8.00 MIN	Ε.	1893																	
NOMINAL DEPARTURE GROUND TIME = 8.00 MIN	-2:	90 -																	
NOMINAL DEPARTURE GROUND TIME = 8.00 MIN	<b>-</b>																		
	av.						Z	DHINA	DEPAR	TURE GROU	IND TIME	8.0	NIE					-	

8408Y DULL
2580 100
2540 100
2550 100
2550 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100
2551 100 BUSY 11975 ONTHLY SUMMARY OF ATHBORNE DELAYS APPLYING AT STL 197 FROM 19 STUDY AIRPORTS 150 2442 | 124 2442 | 124 2444 | 124 2541 | 150 2545 | 151 2566 | 164 2566 | 164 2566 | 164 2566 | 164 2566 | 164 2566 | 164 2566 | 164 2566 | 164 2567 | 200 41444444444 45144141414

PRINTHLY SUMMARY OF TRAFFIC ACTIVITY ARRIVING AT STI

FONTHLY AVERAGES FUR BUSY VS. DULL INTERVALS FOR AIRPORT STL DEPARTURE LARRIVAL GROUND TIMES HY MONTH TABLE 11-20 (c)



NOMINAL DEPARTURE GROUND TIME = 3.00 MIN

10 390196930

---- ALL TIMES APF IN MUURS AND MINUTES ----

	1	1972	-		1413	1374		1915	
-	•	ASIN	ייונו	AUSY	ייאנו	405v	שחרר	AUSY	סחרר
***	:	962	*766	57366	*595	20176	7.90	59649	3615
::	\$\$		5365	61113	\$155	53958	3313	58007	1884
***	70	220	5943	25.99	5503	57421	3341	61632	3977
007	**	911	2590	63721	\$115	55071	2922	58037	3699
***	7.		6137	95.09	\$604	09664	2542	65187	3835
NIT	63	•10	5717	19119	5172	38570	2234	\$7054	3310
111		787	*636	41646	47.12	37045	2102	56889	1395
Pil.	•	*11	6047	11392	11.19	11469	*796	69699	*075
SFD		610	4710	63292	1664	60133	3998	57870	1295
130	65	521	4963	60516	***	40622	***	436A4	2037
*0*	67	166	5506	55770	****	24047	1130	41363	245
250	17	191		611.65	35.0		31.30		
TOTAL	763	103936	64379	743644	29994	000000	36573	706599	42439
	61	1972		1013		-	1974		-1975-
	P.154	חחת		HUSY	חיונו	HUSY	מחרו	RUSY	מחרו
74.	6010	0:07		6950	40:0	0110	1110	0110	6010
FER	60:0	9010		50:0	0:00	0:0	010	0110	6010
***	2010	9010		01:0	0:07	0:0	010	6010	010
700	Bu to	90:0		#0:0	9:00	0:0	0107	W010	010
	10:0	5010		7010	50:0	9010	0107	010	9010
Jun	1010	010		1010	0104	#010	010	0107	6010
Jul	50:0	10:0		9100	0:03	10:0	5010	010	0103
A 16	\$0:0	\$010		9010	0:03	010	0105	9010	010
360	9010	8010		0107	0:04	01:0	9010	0107	5010
120	90:0	0:0		0:07	5010	6010	0107	9010	0105
AUN	F0:0	90:0		60:0	H0:0	0010	8610	0110	0101
340	0:10	401v		6010	010A	0110	.010	0110	0000

............ DEC AUSY OULL AUSY DULL DULL Busr NON DCT MONTHLY AVERAGES FOR BUSY VS. DULL INTERVALS MONTHLY AVERAGES FOR AUSY VS. DULL INTERVALS FOR ALL AIRPORTS DEPARTIMES AMBIVALS
HISY DULL AUSY DULL SEP ............ FOR EXPLANATION OF MISSING DATA DEPARTIBE / SEGIVAL GROUND TIMES BY MONTH AUG JUL 60066666666666 AUSY DULL NOS PAGE 15 MAY 122222222222 APR 400 IVALS MAR FEB 950at TABLE 11-21 (c) NAL FIGURE 11-21 1 × 1 × 0

NAME-- DZCODO

-Z B-ZD-WO